

NTSE STAG 1, 2019-20 GUJARAT STATE

MAT

Instruction: In each of the following question, numbers have been organized in a definite number series where in one number is missing and a question mark(?) is given in its place. Find out the missing number by choosing the correct option.(Q. No. 1 to 10)

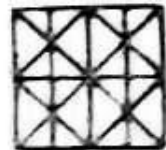
1. 1,4,13,40
(A) 94 (B) 120 (C) 111 (D) 121
2. 1,10,19,28,?,46
(A) 33 (B) 37 (C) 34 (D) 38
3. 12,144,1728,?
(A) 20,736 (B) 20,216 (C) 20,466 (D) 20,376
4. 786,514,378,310,276
(A) 249 (B) 260 (C) 259 (D) 250
5. 2,13,67,271,?,1639?
(A) 1067 (B) 1177 (C) 817 (D) 1371
6. 3,8,20,46,?
(A) 261 (B) 140 (C) 189 (D) 100
7. 12,6,14,12,16,18,18,?,?
(A) 22,20 (B) 24,20 (C) 20,22 (D) 20,24
8. 1728,2744,4096,5832,?,10648
(A) 9261 (B) 8000 (C) 6859 (D) 6400
9. 79,84,81,82,83,?,?
(A) 80,85 (B) 84,85 (C) 85,84 (D) 85,80
10. 88,64,24,?
(A) 10 (B) 12 (C) 8 (D) 14

Instruction: In each of the following question, English alphabets and /or numbers have been organized in a definite number where in alphabet or a group of alphabets is missing and a question mark(?) is given in its place. Find out the missing term by choosing the correct option.(Q. 11 to 20)

11. A,F,K,P,U,Z,E,J,O,?
(A) R (B) S (C) T (D) Q

12. AB, DE, GH,JK,?
 (A) LM (B) NO (C) MN (D) PQ
13. AA,fff, KK, ppp, U,?
 (A) UU (B) U (C) V (D) vv
14. PDZ,?,RBX, SAW
 (A) QCY (B) OCY (C) QCV (D) QYD
15. D,H,Y,E,Y,Y,E,Y, H?
 (A) J (B) I (C) E (D) D
16. A,D,I,P,Y,J,?
 (A) Q (B) T (C) W (D) R
17. $\frac{B}{2}, \frac{E}{5}, \frac{I}{9}, \frac{N}{14}, ?$
 (A) $\frac{S}{19}$ (B) $\frac{R}{18}$ (C) $\frac{I}{20}$ (D) $\frac{U}{21}$
18. AB,1,BC,6,CD,12,DE,?
 (A) 16 (B) 14 (C) 18 (D) 20
19. O,T,T,F,F,S,S,E,N,?.
 (A) O (B) T (C) F (D) S
20. J,F,M,A,M,J,J,?
 (A) J (B) F (C) M (D) A

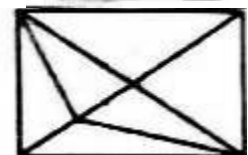
21. How many line segments are there in the given figure?
 (A) 12 (B) 14 (C) 16 (D) 17



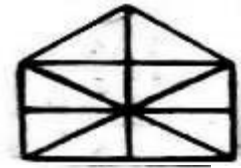
22. How many line segments are there in the given figure?
 (A) 8 (B) 9 (C) 10 (D) 11



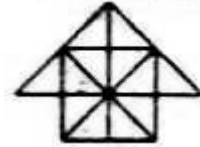
23. How many triangles are there in the given figure?
 (A) 11 (B) 13 (C) 15 (D) 17



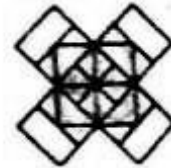
24. How many triangles are there in the given figure?
 (A) 10 (B) 19 (C) 21 (D) 23



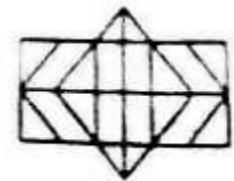
25. How many squares are there in the given figure?
 (A) 4 (B) 5 (C) 6 (D) 7



26. How many squares are there in the given figure?
 (A) 18 (B) 14 (C) 20 (D) 22



27. How many rectangles are there in the given figure?
 (A) 28 (B) 32 (C) 14 (D) 30
















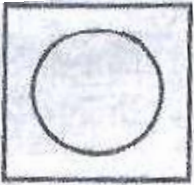
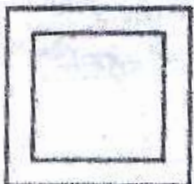






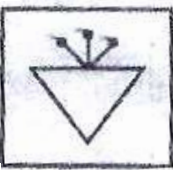
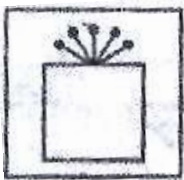
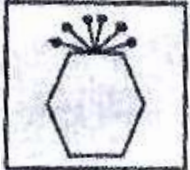




Instruction: (Q. No 28 to 30) Answer the question on the basis of given figure.

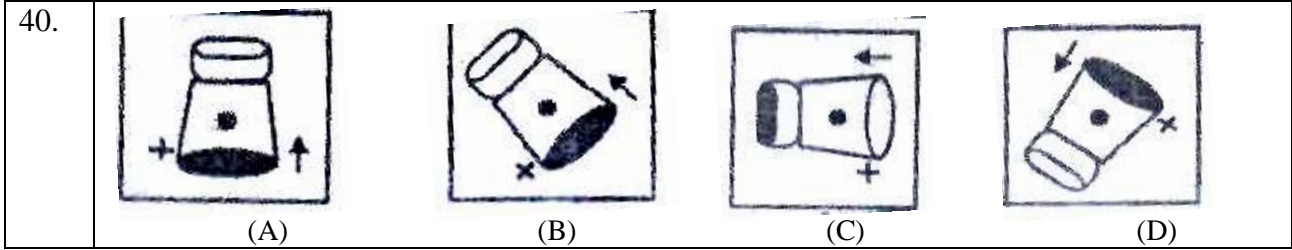


28. How many line segments are there in the given figure?
 (A) 18 (B) 19 (C) 17 (D) 20
29. How many triangles are there in the given figure?
 (A) 40 (B) 36 (C) 38 (D) 42
30. How many squares are there in the given figure ?
 (A) 5 (B) 9 (C) 8 (D) 7

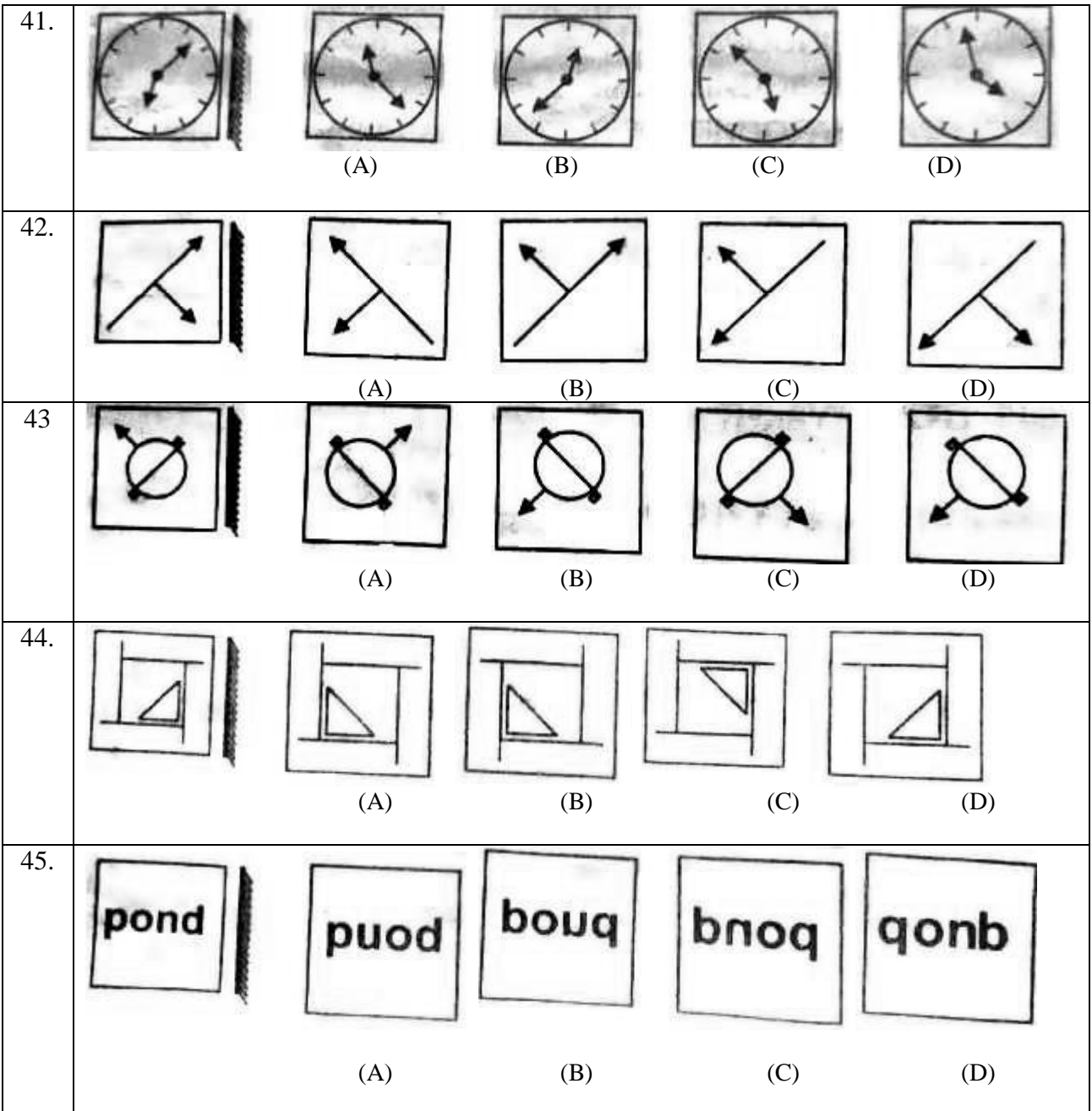
Instruction: (Q. No 31 to 40) Four figures are given in question no. 31 to 40. One of the figures differ from the rest. Find out the figure which is different from the rest of the figures.

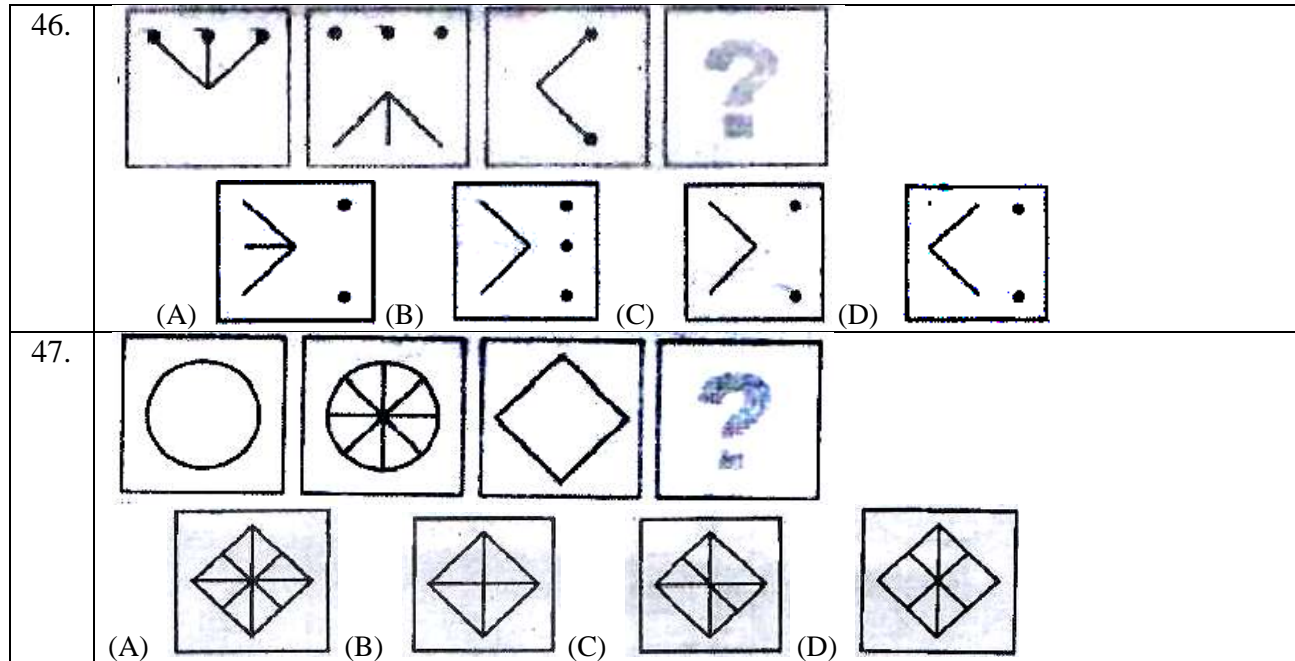
31	<p>(A)</p>	<p>(B)</p>	<p>(C)</p>	<p>(D)</p>
32.	<p>(A)</p>	<p>(B)</p>	<p>(C)</p>	<p>(D)</p>

33.	 <p>(A)</p>	 <p>(B)</p>	 <p>(C)</p>	 <p>(D)</p>
34.	 <p>(A)</p>	 <p>(B)</p>	 <p>(C)</p>	 <p>(D)</p>
35.	 <p>(A)</p>	 <p>(B)</p>	 <p>(C)</p>	 <p>(D)</p>
36.	 <p>(A)</p>	 <p>(B)</p>	 <p>(C)</p>	 <p>(D)</p>
37.	 <p>(A)</p>	 <p>(B)</p>	 <p>(C)</p>	 <p>(D)</p>
38.	 <p>(A)</p>	 <p>(B)</p>	 <p>(C)</p>	 <p>(D)</p>
39.	 <p>(A)</p>	 <p>(B)</p>	 <p>(C)</p>	 <p>(D)</p>



Instruction: Find out the correct minor image of the image shown in question no. 41 to 45.





Instruction: Find out the correct correlation and answer the question no. 46 to 47.

48. Delhi:Hariyana, Orissa:?
 (A) Jammu & Kashmir (B) Andhra Pradesh
 (C) Tamil Nadu (D) Nagaland
49. Horse:Grass : Vehicles:..?
 (A) Smoke (B) Petrol (C) Lubricating Oil (D) Crude Oil
50. Boat:Unship,Ballon:?
 (A) Rubber (B) Nylon (C) Rope (D) Hot Air

Instruction: Answer question no. 51 to 60 as shown in example and find out the correct code from the given options by converting the given words in a symbolic language.

51. If FACE=GBDF then BADE=
 (A) CBEF (B) CEBF (C) CFBE (D) CBFE
52. If RESULT=798206 the nLET=?
 (A) 096 (B) 680 (C) 092 (D) 086
53. If ACE=ZXV then ? =YZW
 (A) BAD (B) ABD (C) EAC (D) SAD
54. If LITTLE=MHUSMD then ?=NTUD
 (A) MUTE (B) MOVE (C) MITE (D) MATE

55. If country=EMWLVPA then ELECTROATE=?
 (A) CJCEVQPYWC (B) GJQERQTYUG
 (C) CNCERQPCRG (D) GJGAVMTYVC
56. If PORTUGESE=ESEGUTROP then MALAYALAM=?
 (A) AMALAYALAM (B) MALAYALAM (C) MALAYALM (D) MALAYLAM
57. If MUSK=146816 then ZERO=?
 (A) 113811 (B) 122912 (C) 15915 (D) 2651815
58. If MOTHERLAND=9501623748 then DREAM=?
 (A) 82697 (B) 86297 (C) 82769 (D) 82679
59. If SCIENTIST =ICSTNETSI then AMBULANCE=?
 (A) MBUALNCEA (B) BMAALUECN (C) MAUBALCNE (D) UBMLAECNA
60. If BOMBAY-GLRYFV then MADRAS=?
 (A) RXIOFP (B) RIXOIP (C) RXIOXP (D) RXIOGQ

Instruction: Four options are given in question no. 61 to 70. One of the options is different from the rest of the three options. Find it out.

61. (A) Sodium (B) Potassium (C) Gallium (D) Calcium Sulfate
 62. (A) 1331 (B) 1728 (C) 4096 (D) 5832
 63. (A) Tabla (B) Drum (C) Pakhavaj (D) Santoor
 64. (A) Mars (B) Mercury (C) Jupiter (D) Pluto
 65. (A) Cone (B) Circle (C) Triangle (D) Rectangle
 66. (A) Kite (B) Bird (C) Radar (D) Aeroplane
 67. (A) Palm (B) Shoulder (C) Knee (D) Elbow
 68. (A) Rabbit (B) Crocodile (C) Sluggish (D) Snails
 69. (A) Short-Vision (B) Spondylitis (C) Glaucoma (D) Conjunctivitis
 70. (A) Amsterdam (B) Europe (C) Antarctica (D) Australia

Instruction: Find out the correct option by choosing logically appropriate sequence.

71. 1.Gujarat 2.Earth 3.Somnath 4. Universe 5.India
 (A) 32154 (B) 24135 (C) 15243 (D) 31254
72. 1.Mother 2.Child 3.Milk 4.Crying 5.Smile
 (A) 23145 (B) 12435 (C) 24135 (D) 15243
73. 1.Rainbow 2.Rain 3.Sun 4.Happy 5.Child
 (A) 42351 (B) 45123 (C) 21435 (D) 23154

74. 1.Table 2.Tree 3.Wood 4.Seed 5.Plant
(A) 13245 (B) 45231 (C) 45321 (D) 12345

75. 1.Snake 2.Grass 3.Eagle 4.Frog 5.Insect
(A) 32145 (B) 52143 (C) 25413 (D) 24531

Instruction: Follow the instruction and choose the correct option.(Q. No 76 to 80)

76. If + means \div , \div means $-$, $-$ means \times and \times means \div then $10 \div 2 - 15 + 3 \times 5 = ?$
(A) 10 (B) 15 (C) 25 (D) 5

77. If Δ means $+$, \square means $-$, \circ means \div and \star means \times then $13 \Delta 5 \star 20 \circ 10 \square 9 = ?$
(A) 26 (B) 14 (C) 37 (D) 55

78. If A means $+$, B means $-$, C means \div and D means \times then $10 D 2 A 5 B 5 = ?$
(A) 15 (B) 12 (C) 20 (D) 10

79. If $P=6, J=4, L=8, M=24$ then $M \times J \div L + J = ?$
(A) 8 (B) 36 (C) 52 (D) 16

80. If Δ means $>$, \square means $<$, \circ means $=$ and $\#$ means \neq and $A \circ B, C \Delta D$ as well as $D \square A$, then which of the following is true?
(A) $C \# A$ (B) $B \Delta D$ (C) $B \square D$ (D) $A \square D$

Instruction: Follow the instruction and choose the correct option.(Q. No. 81 to 100)

81. If fourth Wednesday is on 25th of a month. What will be the date of second Sunday of the same month?
(A) 8 (B) 14 (C) 12 (D) 10

82. Today is Sunday. What day will be there after 112 days?
(A) Friday (B) Sunday (C) Wednesday (D) Monday

83. 15th August, 2019 was Thursday. What day will be there on 15th August, 2020?
(A) Wednesday (B) Friday (C) Saturday (D) Thursday

84. Which of the following is a Leap Year?
(A) 1900 AD (B) 2100 AD (C) 1990 AD (D) 2000 AD

85. A box has 4 white, 5 green and 6 yellow balls in it. By how many ways can 3 balls be selected randomly from the box?
(A) 455 (B) 120 (C) 20 (D) 12

86. If 40 persons shake their hands with one another, what will be the total number of shaking hands?
 (A) 820 (B) 780 (C) 80 (D) 512
87. Proportion ratio of the current age of A and B is 4:5. After 4 years, it will be 8:9. What will be the sum of the age of both A and B?
 (A) 18 years (B) 17 years (C) 9 years (D) 27 years
88. Sum of the current age of Jay and Vijay is 40 years. After 7 years, the proportion ratio of their age will be 4:5. What will be the current age difference of both Jay and Vijay?
 (A) 5 (B) 9 (C) 13 (D) 6
89. Father's age is four times more plus 3 years than son's age. Mother's age is 4 years more than father's age. If son's age is 5 years, what will be the age of mother?
 (A) 19 years (B) 23 years (C) 27 years (D) 21 years
90. What is your relationship with your uncle's wife one and only sister-in-law's daughter?
 (A) Paternal Aunt (B) Maternal Aunt (C) Niece (D) Sister
91. Tanvi walks 8 km in the south from her house. Then she turns left and walks 5 km. Again, she turns left and walks 8 km. How far is she from her house?
 (A) 3 km (B) 8 km (C) 5 km (D) 13 km
92. Rehan walks 5 km in the east. Then he turns perpendicularly left and walks 12 km. Now, at least how kilometers will he have to walk to come back to the starting point?
 (A) 7 km (B) 17 km (C) 8.5 km (D) 13 km
93. If East=South West and South East=West, then South=?
 (A) North West (B) North East (C) North (D) None of these
94. 'A' is the sister-in-law of 'B' and daughter-in-law of 'C'. 'D' is the father of 'E' and 'E' is the one and only brother of 'B'. Then, what is the relation of 'A' with 'E'?
 (A) Sister-in-law (B) Wife (C) Mother (D) Aunt
95. In a row, Saurav is at 10th position from the left side. In the same row, Rahul is at the 10th position from the right side. If both are beside each other, how many persons will be there in that row?
 (A) 28 (B) 19 (C) 18 (D) None of the three
96. In a row of 37 students, Yogesh is at 17th position from the left side. Then, what will be his position from the right side?
 (A) 18th (B) 19th (C) 20th (D) 21st

97. In a row, Joseph is at 15th position from the left side and at 13th position from the right side. How many boys will be there in that row?
(A) 29 (B) 28 (C) 25 (D) 27
98. Basil is taller than Arbutus . Pomegranate is shorter than Hibiscus. Basil is taller than Pomegranate. If Arbutus is taller than Pomegranate, Which will be the shortest plant?
(A) Pomegranate (B) Basil (C) Hibiscus (D) Arbutus
99. 'M' is bigger than 'P'. 'R' is smaller than 'K'. If 'K' is smaller than 'M', then, who is the biggest among all?
(A) K (B) M (C) P (D) R
100. The Rajdhani is longer than the Shatabdi. The Deccan is longer than Mem. The Shatabdi is longer than the Memu. Which train has the least length?
(A) Memu (B) Shatabdi (C) Rajdhani (D) Deccan